

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERC United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/995,832	11/29/2001	Akiko Miyakawa	1642.1001 9732	
21171 7:	590 04/01/2004		EXAMINER	
STAAS & HALSEY LLP			SIMONE, CATHERINE A	
SUITE 700 1201 NEW YORK AVENUE, N.W.			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			1772	
•			DATE MAILED: 04/01/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/995,832	MIYAKAWA ET AL.				
Office Action Summary	Examiner	Art Unit				
. ,	Catherine Simone	1772				
The MAILING DATE of this communication app						
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing - earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 13 Ja	anuary 2004.					
2a)⊠ This action is <b>FINAL</b> . 2b)□ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-14 is/are pending in the application 4a) Of the above claim(s) 4 and 8 is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-3,5-7 and 9-14 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o Application Papers  9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct	er.  epted or b) objected to by the drawing(s) be held in abeyance. Ser	e 37 CFR 1.85(a).				
11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:      1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list	es have been received. es have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachment(s)  1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	y (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail D	Pate Patent Application (PTO-152)				

Art Unit: 1772

### **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3 and 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (4,877,717)

Regarding **claims 1** and **2**, Suzuki et al. discloses a resin-cemented optical element comprising a base member (Fig. 6B-6D, #1) and a resin layer (Fig. 6B-6D, #2) formed on a surface of the base member, wherein the resin layer (Fig. 6D, #2 and Fig. 6E, #4) is in a thickness of 300 µm or smaller (see col. 9, lines 49-51 and see Fig. 9) at least at a part of a region within 1 mm from the peripheral edge face of the resin layer (Fig. 6E, #4). However, Suzuki et al. fails to disclose the resin layer in a thickness of 850 µm or larger at a position which is thickest in the resin layer. Suzuki et al. does teach a thicker portion in the resin layer (see Fig. 6E, #14; also see col. 9, lines 37-39). Therefore, the thickness of the thicker portion of the resin layer would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results. Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the thicker portion of the resin layer in Suzuki et al. to have a thickness of 850 µm or larger, since it has been held that where the general conditions of a claim are disclosed in the prior art,

Art Unit: 1772

discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

Regarding **claim 3**, note at least a part of the region outside an effective-diameter region, the resin layer has a thickness which becomes gradually smaller toward a periphery (Fig. 6D, #2). Regarding **claims 5-7**, note an optical article comprises the resin-cemented optical element according to claims 1 and 2 (see col. 1, lines 7-14). Regarding **claims 9** and **10**, the limitation "made by molding" is a method of production and therefore does not determine the patentability of the product itself. The method of forming the product is not germane to the issue of patentability of the product itself. MPEP 2113. Regarding **claims 11** and **12**, note the base member has a concave (see col. 13, line 67) molding surface.

Regarding **claims 13** and **14**, Suzuki et al. discloses a resin-cemented optical element comprising a base member (Fig. 6B-6D, #1) and a resin layer (Fig. 6B-6D, #2) formed on a surface of the base member, wherein the resin layer (Fig. 6D, #2 and Fig. 6E, #4) is in a thickness of 300 µm or smaller (see col. 9, lines 49-51 and see Fig. 9) at least at a part of a region within 1 mm from the peripheral edge face of the resin layer (Fig. 6E, #4). However, Suzuki et al. fails to disclose a maximum thickness of at least 850 µm and a diameter of at least 34 mm. Suzuki et al. does, however, teach a thicker portion in the resin layer and a thickness of the resin (see Fig. 6E, #14 and Fig. 9; also see col. 9, lines 37-39) and a diameter of the resin (see Figs. 9 and 10 and col. 12, lines 21-54). Therefore, the optimum ranges for the maximum thickness and diameter of the resin layer would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results as shown by Suzuki et al.

Thus, it would have been obvious to one of ordinary skill in the art at the time the applicant's

Art Unit: 1772

invention was made to have modified the resin layer in Suzuki et al. to have a maximum thickness of at least 850 µm and a diameter of at least 34 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *In re Boesch and Slaney*, 205 USPQ 215 (CCPA 1980).

## Response to Arguments

3. Applicant's arguments filed 1/13/04 have been fully considered but they are not persuasive. Applicants argue that "Figs. 9-11 in Suzuki show microlenses resulting from experiments having diameters ranging from about 20-500 μm, and thicknesses ranging from about 0.23-3.73 μm. Further, Fig. 4 shows a microlens "...having a diameter of 100 μm .." and a maximum thickness of 10 μm. (Suzuki col. 9, lines 45-51 – emphasis added) The successfully formed microlenses disclosed in Suzuki are limited to be significantly smaller than the resincemented optical elements of the subject application. Thus, Suzuki neither discloses, nor suggests a resin layer having a thickness that is "...850 μm or larger at a position which is thickest in said resin layer." However, it is to be pointed out that the optimum range for the thickness of the thicker portion of the resin layer would be readily determined through routine experimentation by one having ordinary skill in the art depending on the desired end results and it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the thickness of the thicker portion of the resin layer in Suzuki et al. to have a thickness of 850 μm or larger, since it has been held that where the general conditions

Art Unit: 1772

of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. MPEP 2144.05(II).

#### Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1772

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Catherine Simone Examiner Art Unit 1772 March 23, 2004

SUPERVISORY PATENT EXAMINER